

## Lab No. 4: Study of ETHERNET Frames

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### Exercise 1

After configuring the ETHREAL software on each machine in the local network (as explained in the theoretical section), on each machine x with an IP address IP<sub>x</sub>, execute the following MS-DOS command: **ping IP<sub>y</sub>** where IP<sub>y</sub> is the IP address of another machine y. Then, stop the capture.

1. Analyze the general information of the ETHERNET frame (information found in the frame line within section B of the ETHREAL window).
2. Retrieve different packet details (as explained in the theoretical section) from the ping command results, including:
  - Time, source, destination, and protocol information from section A of the ETHREAL window.
  - Various headers displayed in section B for each protocol captured.
3. In this lab, we focus on the network access layer header in the TCP/IP model, which corresponds to the physical and data link layers in the OSI model (ETHERNET header, section B). Fill in the following table for each protocol displayed.

<b>Source address</b>	
<b>Destination address</b>	
<b>Protocol Type</b>	

### Exercise 2

In this exercise, we will determine the protocol that enables access to shared resources from a machine on the local network.

1. Launch ETHREAL, then access shared resources from another machine on the LAN.
  - For example, click Start > Run, type: \\192.168.0.1
  - Then, stop the capture.
2. Identify the protocol responsible for this activity.
3. Complete the previous table.
4. Identify any differences (if applicable) between the resulting table and the previous ones.